OBD2 OWNER'S MANUAL

FASTER &
EASIER

FOR 1996
AND
NEWER
OBD II
VEHICLES

DIGITAL
AUTO SCANNER

RDT40
DIGITAL
OBD2/CAN
CODE READER

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1. INTRODUCTION

1.1 About OBD2 Code Reader

This powerful tool will help you take charge of your vehicle's maintenance and servicing needs. Today vehicles use Computer Control Systems to ensure peak per-formance and fuel-efficiency while reducing pollutants in the vehicle's emissions. These systems also have the ability to perform self-testing and diagnose various vehicle systems and components, and provide valuable information to aid in servicing and repair. However, these sophisticated systems often required expensive tools and test equipment in order to retrieve this information. Until now, consumers had to rely on professional service technicians to maintain their vehicles in top condition.

OBD2 Code Reader brings the power of the technician into your hands in a cost-effective, easy-to-use package. Whether you are a "put the key in and go" consumer, hobby mechanic or skilled DIYer, Code Reader offers the features and functions you need to take control of your vehicle's testing, servicing and maintenance needs.

1.2 Safety Precautions and Warnings

To prevent personal injury or damage to vehicles and/or the Scan Tool, read this instruction manual first and observe the following safety precautions at a minimum whenever working on a vehicle:

1. Always perform automotive testing in a safe environment.
2. Wear safety eye protection that meets ANSI standards.
3. Keep clothing, hair, hands, tools, test equipment, etc, away from all moving or hot engine parts.
4. Operate the vehicle in a well-ventilated work area; Exhaust gases are poisonous.
5. Put blocks on drive wheels and never leave vehicle unattended while running tests.

6. Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.

7. Put transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking break is engaged.

8. Keep a fire extinguisher suitable for gasoline/chemical/electrical fires nearby.

9. Don't connect or disconnect any test equipment with ignition on or engine running.

10. Keep the Scan Tool dry, clean and free from oil, water and grease. Use a mild detergent on a clean cloth to clean the outside of the Scan Tool, when necessary.

2. GENERAL INFORMATION

2.1 On-Board-Diagnostics (OBD) 2

The first generation of On-Board Diagnostic (called OBD I) was developed by the California Air Resources Board (ARB) and implemented in 1988 to monitor some of the emission control components on vehicles. As technology and the desire to improve On-Board Diagnostic capability increased, a new generation of On-Board Diagnostics system was developed. This second generation of On-Board Diagnostic regulations is called "OBD II".

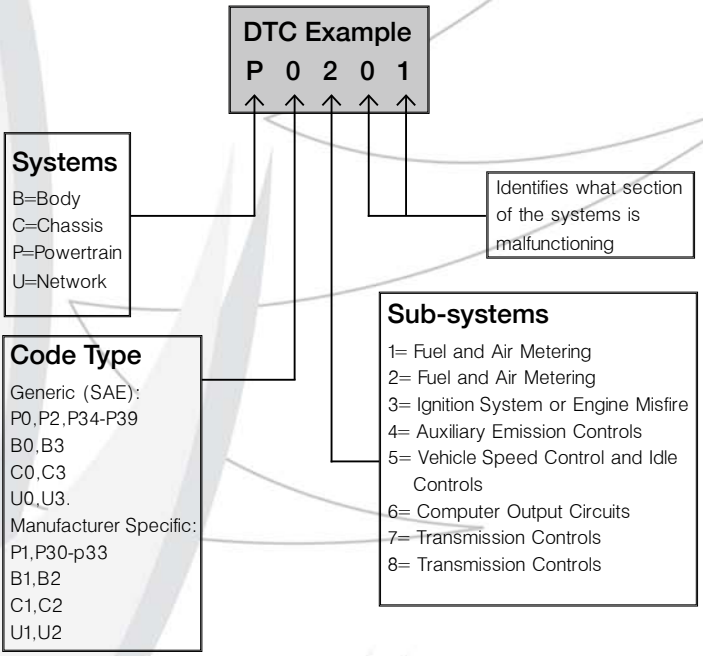
The OBD II system is designed to monitor emission control systems and key engine components by performing either continuous or periodic tests of specific components and vehicle conditions. When a problem is detected, the OBD II system turns on a warning lamp (MIL) on the vehicle instrument panel to alert the driver typically by the phrase of "Check Engine" or "Service Engine Soon". The system will also store important information about the detected malfunction so that a technician can

accurately find and fix the problem. Here below follow three pieces of such crucial information:

- Whether the Malfunction Indicator Light (MIL) is commanded 'on' or 'off';
- Which, if any, Diagnostic Trouble Codes (DTCs) are stored;
- Readiness Monitor status.

2.2 Diagnostic Trouble Codes (DTCs)

OBDII Diagnostic Trouble Codes are stored by the on-board computer diagnostic system in response to a problem found in the vehicle. These codes identify a particular problem area and are intended to provide you with a guide as to where a fault might be occurring within a vehicle. OBDII Diagnostic Trouble Codes consist of a five-digit alphanumeric code. The first character, a letter, identifies which control system sets the code. The other four characters, all numbers,provide additional information on where the DTC originated and the operating conditions that caused it to set. Here below is an example to illustrate the structure of the digits:



2.3 Location of the Data Link Connector (DLC)

The DLC (Data Link Connector or Diagnostic Link Connector) is the standardized 16-cavity connector where diagnostic scan tools interface with the vehicle's on-board computer. The DLC is usually located 12 inches from the center of the instrument panel (dash), under or around the driver's side for most vehicles. For some Asian and European vehicles, the DLC is located behind the ashtray and the ashtray must be removed to access the connector. Refer to the vehicle's service manual for the location if the DLC can not be found.

2.4 OBD II Readiness Monitors

An important part of a vehicle's OBDII system is the Readiness monitors, which are indicators used to find out if all of the emissions

components have been evaluated by the OBD II system. They are running periodic tests on specific systems and components to ensure that they are performing within allowable limits.

Currently, there are eleven OBD II Readiness Monitors (or I/M Monitors) defined by the U.S. Environmental Protection Agency (EPA). Not all monitors are supported by all vehicles and the exact number of monitors in any vehicle depends on the motor vehicle manufacturer's emissions control strategy.

Continuous Monitors -- Some of the vehicle components or systems are continuously tested by the vehicle's OBDII system, while others are tested only under specific vehicle operating conditions. The continuously monitored components listed below are always ready:

1. Misfire
2. Fuel System
3. Comprehensive Components (CCM)

Once the vehicle is running, the OBDII system is continuously checking the above components, monitoring key engine sensors, watching for engine misfire, and monitoring fuel demands.

Non--Continuous Monitors -- Unlike the continuous monitors,many emissions and engine system components require the vehicle to be operated under specific conditions before the monitor is ready. These monitors are termed non-continuous monitors and are listed below:

1. EGR System
2. O2 Sensors
3. Catalyst
4. Evaporative System
5. O2 Sensor Heater
6. Secondary air
7. Heated Catalyst
8. A/C system

2.5 OBD II Monitor Readiness Status

OBD II systems must indicate whether or not the vehicle's PCM monitor system has completed testing on each component. Components that have been tested will be reported as Ready, or Complete, meaning they have been tested by the OBD II system. The purpose of recording readiness status is to allow inspectors to determine if the vehicle's OBD II system has tested all the components and/or systems.

The powertrain control module (PCM) sets a monitor to"Ready" or "Complete" after an appropriate drive cycle has been performed. The drive cycle that enables a monitor and sets readiness codes to ready varies for each individual monitor. Once a monitor is set as "Ready" or "Complete", it will remain in this state. A number of factors, including erasing of diagnostic trouble codes (DTCs) with a scan tool or a disconnected battery, can result in Readiness Monitors being set to "not ready". Since the three continuous monitors are constantly evaluating, they will be reported as "Ready" all of the time. If testing of a particular supported non-continuous monitor has not been completed, the monitor status will be reported as "Not Complete" or "Not Ready".

In order for the OBD monitor system to become ready, the vehicle should be driven under a variety of normal operating conditions. These operating conditions may include a mix of highway driving and stop and go, city type driving, and at least one overnight-off period. For specific information on getting your vehicle's OBD monitor system ready, please consult your vehicle owner's manual.

2.6 OBD II Definitions

Powertrain Control Module (PCM)--OBDII terminology for the on-board computer that controls engine and drive train.

Malfunction Indicator Light (MIL)--Malfunction Indicator Light (Service Engine Soon,Check Engine) is a term used for the light on the instrument panel. It is to alert the driver and/or the repair technician that there is a problem with one or more of vehicle's systems and may cause emissions to exceed federal standards. If the MIL illuminates with a steady light,it indicates that a problem has been detected and the vehicle should be serviced as soon as possible. Under certain conditions,the dashboard light will blink or flash. This indicates a severe problem and flashing is intended to discourage vehicle operation. The vehicle on-board diagnostic system can not turn the MIL off until the necessary repairs are completed or the condition no longer exists.

DTC--Diagnostic Trouble Codes (DTC) that identify which section of the emission control system has malfunctioned.

Enabling criteria--Also termed Enabling Conditions. They are the vehicle-specific events or conditions that must occur within the engine before the various monitors will set,or run. Some monitors require the vehicle to follow a prescribed "drive cycle" routine as part of the enabling criteria. Drive cycles vary among vehicles and for each monitor in any particular vehicle.

OBDII Drive Cycle--A specific mode of vehicle operation that provides condition required to set all the readiness monitors applicable to the vehicle to the "ready" condition. The purpose of completing an OBD II drive cycle is to force the vehicle to run its on-board diagnostics. Some form of a drive cycle needs to be performed after DTCs have been erased from the PCM's memory or after the battery has been disconnected. Running through a vehicle's complete drive cycle will "set" the readiness monitors so that future faults can be detected. Drive cycles vary depending on the vehicle and the monitor that needs to be reset. For vehicle specific drive cycle,consult the vehicle's Owner's Manual.

3. PRODUCT INFORMATION

3.1 Tool Description

1.LCD DISPLAY--Indicates test results. It is a backlit 2-line display with 8 characters on each line.

2. ENTER BUTTON--Confirms a selection (or action) from a menu list,or returns to the main menu.

3.SCROLL BUTTON--Scrolls through menu items or cancel an operation

4.OBD II CONNECTOR--Connects the Code Scanner to the vehicle's Data Link Connector (DLC).

3.2 Product Specifications

1. Display: LCD,2 lines,8 characters,backlit
2. Operating Temperature: 0 to 50˚C (-32 to 122 F˚)
3. Storage Temperature: -20 to 70˚C (-4 to 158 F˚)
4. Power provided via detachable heavy duty OBD II cable
5. Dimensions:

Length	Width	Height
126 mm (5.0)	78 mm (3.2)	28mm (0.85)

6. Weight: 200g (7.12 oz)

3.3 Product Features

1. Works with all 1996 and newer cars & trucks that are OBD II compliant (including the CAN,VPW,PWM,ISO and KWP 2000).
2. Reads and clears generic and manufacturer specific Diagnostic Trouble Codes (DTCs) and turns off check engine light.
3. Supports multiple trouble code requests, generic codes, pending codes and manufacturers' specific codes.
4. Reviews the emission readiness status of OBD monitors.
5. Retrieves VIN (Vehicle Identification No.) on 2002 and newer vehicles that support Mode 9.
6. Determines the malfunction indicator lamp (MIL) status.
7. Easy-to-use with one plug-in; Highly reliable and accurate.
8. Easy-to-read crystal-clear backlit 2-line LCD display.
9. Stand-alone unit with no need for an additional laptop computer to operate.
10. Small in size and conveniently fits in your palm.
11. Safely communicates with the on-board computer.
12. No batteries needed--powered via detachable OBD II cable.

3.4 Vehicle Coverage

The T40e OBD II Scan Tool is specially designed to work with all OBDII compliant vehicles, including those equipped with the next-generation protocol-Control Area Network (CAN). It is required by EPA that All 1996 and newer vehicles (cars and light trucks) sold in the United States must be OBD II compliant and this includes all Domestic, Asian and European vehicles.

A small number of 1994 and 1995 model year gasoline vehicles are OBD II compliant. To verify if a 1994 or 1995 vehicle is OBD II compliant, check the Vehicle Emissions Control Information (VECI) Label which is located under the hood or by the radiator of most vehicles. If the vehicle

is OBD II compliant, the label will designate "OBD II Certified". Additionally, Government regulations mandate that all OBD II compliant vehicles must have a "common" sixteen- pin Data Link Connector (DLC).

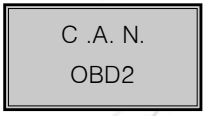
For your vehicle to be OBD II compliant, it must have a 16-pin DLC (Data Link Connector) under the dash and the Vehicle Emission Control Information Label must state that the vehicle is OBD II compliant.

4. Operating Instructions

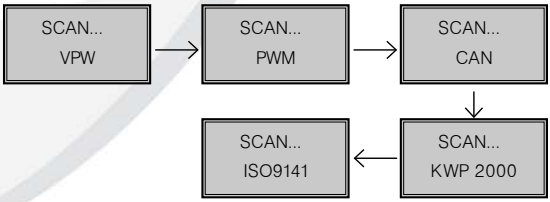
4.1 Reading Codes:

CAUTION: Don't connect or disconnect any test equipment with ignition on or engine running.

1) Turn the ignition off.
2) Locate the 16-pin Data Link Connector (DLC) and plug into the Scan Tool cable connector to the DLC.
3) Wait for the LCD display to read C. A. N. OBD2.



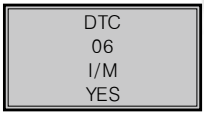
4) Turn the ignition on. But do not start the engine.
5) Press the **ENTER** button. A sequence of messages showing the OBD protocols may be observed on the display until the vehicle protocol is detected.



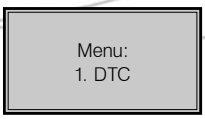
- Not all the above messages will be observed unless the protocol used by the vehicle being tested is the last one the ISO9141 protocol. They will stop appearing after the vehicle protocol is detected and a confirmation message of XXX Protocol is displayed.

If a **"LINK ERROR!"** message shows up, turn the ignition off for about 10 seconds, check if the Scan Tool's OBDII connector is securely connected to the vehicle s DLC, and then turn the ignition back to on. Repeat the procedure from step 5. If the **"LINK ERROR"** message does not go away, then there may be problems for the Scan Tool to communicate with the vehicle.

6) Wait for the main menu to come up after a brief overview displaying the scanning results with the total number of **DTC**s and the overall I/M Monitor Status.

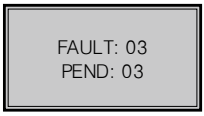


7) Select "**DTC**" from the main menu by pressing the **ENTER** button.



- If there are no Diagnostic Trouble Codes retrieved, the display will indicate **"NO CODES"**.

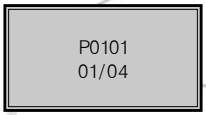
- If there are any Diagnostic Trouble Codes, then the total number of the Fault Codes followed by that of the Pending Codes will be reported on the display.



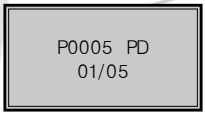
8) Read the Diagnostic Trouble Codes by pressing the **SCROLL** button.

- The first code number will display on the first line of the LCD display, the numerical sequence of the code and the total number of the codes

stored will appear on the second line. To view additional codes, press the **SCROLL** button to scroll, as necessary, until all the codes have been shown up.



• If the code retrieved is a pending code, a "**PD**" will show on the LCD display in the end.



• To view previous codes, press the **SCROLL** button to scroll through to the end, and then start from the first of the list.

9) Look up part 5 for Diagnostic Trouble Code Definitions. Match the retrieved DTC(S) with those listed and read the definitions.

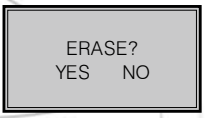
4.2 Erasing Codes:

CAUTION: Erasing the Diagnostic Trouble Codes allows the Scan Tool to delete not only the codes from the vehicle's on-board computer, but also "Freeze Frame" data and manufacturer specific enhanced data. Further, the I/M Readiness Monitor Status for all vehicle Monitors is reset to "Not Ready" or "Not Complete" status. Do not erase the codes before the system has been checked completely by a technician.

1) If you decide to erase the DTCs, Select **"2. ERASE"** from the main menu by pressing the **ENTER** button.

• If the Scan Tool is not connected or no communication is established with the vehicle yet, then refer to "Reading Codes" from 1 to 6. at Paragraph 4.1.

2) A message of **"ERASE? YES NO"** comes up asking for your confirmation.



3) If you do not want to proceed with erasing the codes, press the **SCROLL** button to exit.

4) If you do wish to proceed to erase the codes, then press the **ENTER** button.

5) If the codes are cleared successfully, an **"ERASE DONE!"** message will show on the display. Press the **ENTER** button to Return to the main **Menu** list.

6) If the codes are not cleared, then an **"ERASE FAIL!"** message will appear. Press the **ENTER** button to Return to the main **Menu** list.

HOT KEY: Pressing and Holding the **SCROLL** button for about 3 seconds will allow you to more quickly erase the DTCs than through the main menu.

4.3 RETRIEVING I/M READINESS STATUS:

Important: I/M Readiness function is used to check the operations of the Emission System on OBD2 compliant vehicles. It is an excellent function to use prior to having a vehicle inspected for compliance to a state emissions program. An I/M Readiness Status result of "NO" does not necessarily indicate that the vehicle being tested will fail the state I/M inspection. For

some states, one or more such monitors may be allowed to be "Not Ready" to pass the emissions inspection.

"YES" --All monitors supported on the vehicle have completed their diagnostic testing and the MIL light is not on.

"NO"--At least one monitor supported on the vehicle has not completed its diagnostic testing, and (or) the Check Engine (MIL) light is on.

"READY"--indicates that a particular monitor being checked has completed its diagnostic testing;

"Not RDY(NOT READY)"--indicates a particular monitor being checked has not completed its diagnostic testing;

"N/A"--The monitor is not supported on that vehicle.

" → " --A flashing Right Arrow Indicating additional information is available on the next screen.

" ← " --A flashing Left Arrow Indicating additional information is available on the previous screen.

1) Select "3. I/M" from the main menu by pressing the **ENTER** button.

• If the Scan Tool is not connected yet, then refer to **" Reading Codes"** from 1 to 6. at Paragraph 4.1.

2) Use the **SCROLL** button to view the status of the **MIL** light (**"ON"** or **"OFF"**) and the following monitors:

MISFIRE"--Misfire monitor

FUEL--Fuel System Monitor

CCM--Comprehensive Components Monitor

EGR--EGR System Monitor

O2S--O2 Sensors Monitor

AT--Catalyst Monitor

EVAP--Evaporative System Monitor
HO2S--O2 Sensor Heater Monitor
2AIR-- Secondary Air Monitor
HCM--Heated Catalyst Monitor
A/C--A/C system Monitor

3) Press the **ENTER** button to return to the main Menu.

4.4 Viewing VIN Number

The View VIN function allows you to view the Vehicle Identification No. on 2002 and newer vehicles that support Mode 9.

1) Select **4. VIN** from the main menu by pressing the **ENTER** button.

- If the Scan Tool is not connected yet, then refer to **"Reading Codes"** from 1 to 6. at Paragraph 4.1.

2). Use the **SCROLL** button to view additional digits of the 17-digit string.

- " → "-- A flashing Right Arrow Indicating additional digits of VIN string are available on the next screen.
- " ← "-- A flashing Left Arrow Indicating additional digits of VIN string are available on the previous screen.

3) Press the **ENTER** button to return to the main Menu.

4.5 Rescanning Data

The RESCAN function allows you to retrieve the most current data stored in the ECM or to re-link to the vehicle.
if communication is disconnected.

1) Select "**5. RESCAN**" from the main menu by pressing the **ENTER** button.

Menu:
5.RESCAN

• If the Scan Tool is not connected yet, then refer to **"Reading Codes"** from 1 to 6. at Paragraph 4.1.

2) Use either the **SCROLL** or **ENTER** button to return to the main menu.

5. Diagnostic Trouble Code (DTC) Definitions

The following Diagnostic Trouble Code Definitions lists provide Generic Diagnostic Trouble Codes, and Manufacturer Specific Diagnostic Trouble Code Definitions for CHRYSLER and TOYOTA only. others consult the vehicle s service manual or the enclosed CD software.

CAUTION: Parts or components should not be replaced based on only a DTC without first consulting the vehicle service manual for more information on possible causes of the fault as well as required testing procedures.

5.1 OBDII Generic DTC Definitions

OBDII Generic DTC Definitions	
P0001	Fuel Volume Regulator Control Circuit Open
P0002	Fuel Volume Regulator Control Circuit Range/Performance
P0003	Fuel Volume Regulator Control Circuit Low
P0004	Fuel Volume Regulator Control Circuit High
P0005	Fuel Shutoff Valve. A Control Circuit Open
P0006	Fuel Shutoff Valve. A Control Circuit Low
P0007	Fuel Shutoff Valve. A Control Circuit High
P0008	Engine Position System Performance (Bank 1)
P0009	Engine Position System Performance (Bank 2)
P0010	Camshaft Position Actuator A -Bank 1 Circuit Malfunction
P0011	Camshaft Position Actuator A -Bank 1 Timing Over-Advanced

OBDII Generic DTC Definitions	
P0012	Camshaft Position Actuator A - Bank 1 Timing Over-Retarded
P0013	Camshaft Position Actuator B - Bank 1 Circuit Malfunction
P0014	Camshaft Position Actuator B - Bank 1 Timing Over-Advanced
P0015	Camshaft Position Actuator B - Bank 1 Timing Over-Retarded
P0016	Cam/Crankshaft Pos. Correlation Sensor A - Bank 1
P0017	Cam/Crankshaft Pos. Correlation Sensor B - Bank 1
P0018	Cam/Crankshaft Pos. Correlation Sensor A - Bank 2
P0019	Cam/Crankshaft Pos. Correlation Sensor B - Bank 2
P0020	Camshaft Position Actuator A - Bank 2 Circuit Malfunction
P0021	Camshaft Position Actuator A - Bank 2 Timing Over-Advanced
P0022	Camshaft Position Actuator A - Bank 2 Timing Over-Retarded
P0023	Camshaft Position Actuator B - Bank 2 Circuit Malfunction
P0024	Camshaft Position Actuator B - Bank 2 Timing Over-Advanced
P0025	Camshaft Position Actuator B - Bank 2 Timing Over-Retarded
P0026	Intake Valve-Bank 1 Control Solenoid CKT Range/Performance
P0027	Exhaust Valve-Bank1 Control Solenoid CKT Range/Performance
P0028	Intake Valve-Bank 2 Control Solenoid CKT Range/Performance
P0029	Exhaust Valve-Bank2 Control Solenoid CKT Range/Performance
P0030	HO2S Bank 1 Sensor 1 Heater Circuit
P0031	HO2S Bank 1 Sensor 1 Heater Circuit Low
P0032	HO2S Bank 1 Sensor 1 Heater Circuit High
P0033	Turbo/Sup Wastegate Control Circuit
P0034	Turbo/Sup Wastegate Control Circuit Low
P0035	Turbo/Sup Wastegate Control Circuit High
P0036	HO2S Bank 1 Sensor 2 Heater Circuit
P0037	HO2S Bank 1 Sensor 2 Heater Circuit Low
P0038	HO2S Bank 1 Sensor 2 Heater Circuit High
P0039	Turbo/Super Charger Bypass Control CKT Performance
P0040	O2 Bank 1 Sensor 1 Signals Swapped w/ O2 Bank 2 Sensor 1
P0041	O2 Bank 1 Sensor 2 Signals Swapped w/ O2 Bank 2 Sensor 2
P0042	HO2S Bank 1 Sensor 3 Heater Circuit
P0043	HO2S Bank 1 Sensor 3 Heater Circuit Low
P0044	HO2S Bank 1 Sensor 3 Heater Circuit High
P0045	Turbo/Super Charger Boost Control Solenoid A Circuit Open
P0046	Turbo/Super Charger Boost Control Solenoid A Circuit Range/ Perform
P0047	Turbo/Super Charger Boost Control Solenoid A Circuit Low

OBDII Generic DTC Definitions	
P0048	Turbo/Super Charger Boost Control Solenoid A Circuit High
P0049	Turbo/Super Charger Boost Input/Turbine Speed Overspeed
P0050	HO2S Bank 2 Sensor 1 Heater Circuit
P0051	HO2S Bank 2 Sensor 1 Heater Circuit Low
P0052	HO2S Bank 2 Sensor 1 Heater Circuit High
P0053	HO2S Bank 1 Sensor 1 Heater Resistance
P0054	HO2S Bank 1 Sensor 2 Heater Resistance
P0055	HO2S Bank 1 Sensor 3 Heater Resistance
P0056	HO2S Bank 2 Sensor 2 Heater Circuit
P0057	HO2S Bank 2 Sensor 2 Heater Circuit Low
P0058	HO2S Bank 2 Sensor 2 Heater Circuit High
P0059	HO2S Bank 2 Sensor 1 Heater Resistance
P0060	HO2S Bank 2 Sensor 2 Heater Resistance
P0061	HO2S Bank 2 Sensor 3 Heater Resistance
P0062	HO2S Bank 2 Sensor 3 Heater Circuit
P0063	HO2S Bank 2 Sensor 3 Heater Circuit Low
P0064	HO2S Bank 2 Sensor 3 Heater Circuit High
P0065	Air Assisted Injector. Control Range/Performance
P0066	Air Assisted Injector. Control Circuit Low
P0067	Air Assisted Injector. Control Circuit High
P0068	MAF/MAP Sensor Throttle Position Correlation
P0069	MAP/BARO Correlation
P0070	Ambient Air Temp. Sensor Circuit
P0071	Ambient Air Temp. Sensor Range/Performance
P0072	Ambient Air Temp. Sensor Circuit Low
P0073	Ambient Air Temp. Sensor Circuit High
P0074	Ambient Air Temp. Sensor CKT Intermittent
P0075	Intake Valve-Bank 1 Control Circuit
P0076	Intake Valve-Bank 1 Control Circuit Low
P0077	Intake Valve-Bank 1 Control Circuit High
P0078	Exhaust Valve-Bank1 Control Circuit
P0079	Exhaust Valve-Bank1 Control Circuit Low
P0080	Exhaust Valve-Bank1 Control Circuit High
P0081	Intake Valve-Bank 2 Control Circuit
P0082	Intake Valve-Bank 2 Control Circuit Low
P0083	Intake Valve-Bank 2 Control Circuit High

OBDII Generic DTC Definitions	
P0084	Exhaust Valve-Bank2 Control Circuit
P0085	Exhaust Valve-Bank2 Control Circuit Low
P0086	Exhaust Valve-Bank2 Control Circuit High
P0087	Fuel Rail Pressure Too Low
P0088	Fuel Rail Pressure Too High
P0089	Fuel Pressure Regulator 1 Performance
P0090	Fuel Pressure Regulator 1 Control Circuit
P0091	Fuel Pressure Regulator 1 Control Circuit Low
P0092	Fuel Pressure Regulator 1 Control Circuit High
P0093	Fuel System Leak (Large)
P0094	Fuel System Leak (Small)
P0095	IAT Sensor 2 Circuit
P0096	IAT Sensor 2 CKT Range/Performance
P0097	IAT Sensor 2 Circuit Low
P0098	IAT Sensor 2 Circuit High
P0099	IAT Sensor 2 CKT Intermittent
P0100	MAF or VAF A Circuit Malfunction
P0101	MAF or VAF A Circuit Range/Performance
P0102	MAF or VAF A Circuit Low Input
P0103	MAF or VAF A Circuit High Input
P0104	MAF or VAF A Circuit Intermittent
P0105	MAP/BARO Circuit Malfunction
P0106	MAP/BARO CKT Range/Performance
P0107	MAP/BARO Circuit Low Input
P0108	MAP/BARO Circuit High Input
P0109	MAP/BARO CKT Intermittent
P0110	IAT Sensor Circuit Malfunction
P0111	IAT Sensor 1 CKT Range/Performance
P0112	IAT Sensor 1 Circuit Low Input
P0113	IAT Sensor 1 Circuit High Input
P0114	IAT Sensor 1 CKT Intermittent
P0115	Engine Coolant Temp Circuit Malfunction
P0116	Engine Coolant Temp CKT Range/Performance
P0117	Engine Coolant Temp Circuit Low Input
P0118	Engine Coolant Temp Circuit High Input
P0119	Engine Coolant Temp CKT Intermittent

OBDII Generic DTC Definitions	
P0120	TPS/Pedal Position Sensor A Circuit Malfunction
P0121	TPS/Pedal Position Sensor A CKT Range/Performance
P0122	TPS/Pedal Position Sensor A Circuit Low Input
P0123	TPS/Pedal Position Sensor A Circuit High Input
P0124	TPS/Pedal Position Sensor A CKT Intermittent
P0125	Closed Loop Fuel Ctrl Insufficient Coolant Temp
P0126	Coolant Temp Insufficient Stable Operation
P0127	IAT Sensor Too High
P0128	Coolant Temp Below Thermostat Regulating Temp
P0129	Barometric Pressure Too Low
P0130	O2 Sensor Circuit Malfunction (Bank 1 Sensor 1)
P0131	O2 Sensor Circuit Low Volts (Bank 1 Sensor 1)
P0132	O2 Sensor Circuit High Volts (Bank 1 Sensor 1)
P0133	O2 Sensor CKT Slow Response (Bank 1 Sensor 1)
P0134	O2 Sensor CKT No Activity (Bank 1 Sensor 1)
P0135	O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 1)
P0136	O2 Sensor Circuit Malfunction (Bank 1 Sensor 2)
P0137	O2 Sensor Circuit Low Volts (Bank 1 Sensor 2)
P0138	O2 Sensor Circuit High Volts (Bank 1 Sensor 2)
P0139	O2 Sensor CKT Slow Response (Bank 1 Sensor 2)
P0140	O2 Sensor CKT No Activity (Bank 1 Sensor 2)
P0141	O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)
P0142	O2 Sensor Circuit Malfunction (Bank 1 Sensor 3)
P0143	O2 Sensor Circuit Low Volts (Bank 1 Sensor 3)
P0144	O2 Sensor Circuit High Volts (Bank 1 Sensor 3)
P0145	O2 Sensor CKT Slow Response (Bank 1 Sensor 3)
P0146	O2 Sensor CKT No Activity (Bank 1 Sensor 3)
P0147	O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 3)
P0148	Fuel Delivery Malfunction
P0149	Fuel Timing Malfunction
P0150	O2 Sensor Circuit Malfunction (Bank 2 Sensor 1)
P0151	O2 Sensor Circuit Low Volts (Bank 2 Sensor 1)
P0152	O2 Sensor Circuit High Volts (Bank 2 Sensor 1)
P0153	O2 Sensor CKT Slow Response (Bank 2 Sensor 1)
P0154	O2 Sensor CKT No Activity (Bank 2 Sensor 1)
P0155	O2 Sensor Heater Circuit Malfunction (Bank 2 Sensor 1)

OBDII Generic DTC Definitions	
P0156	O2 Sensor Circuit Malfunction (Bank 2 Sensor 2)
P0157	O2 Sensor Circuit Low Volts (Bank 2 Sensor 2)
P0158	O2 Sensor Circuit High Volts (Bank 2 Sensor 2)
P0159	O2 Sensor CKT Slow Response (Bank 2 Sensor 2)
P0160	O2 Sensor CKT No Activity (Bank 2 Sensor 2)
P0161	O2 Sensor Heater Circuit Malfunction (Bank 2 Sensor 2)
P0162	O2 Sensor Circuit Malfunction (Bank 2 Sensor 3)
P0163	O2 Sensor Circuit Low Volts (Bank 2 Sensor 3)
P0164	O2 Sensor Circuit High Volts (Bank 2 Sensor 3)
P0165	O2 Sensor CKT Slow Response (Bank 2 Sensor 3)
P0166	O2 Sensor CKT No Activity (Bank 2 Sensor 3)
P0167	O2 Sensor Heater Circuit Malfunction (Bank 2 Sensor 3)
P0168	Engine Fuel Temperature Too High
P0169	Fuel Composition Incorrect
P0170	Fuel Trim Malfunction (Bank 1)
P0171	System Too Lean (Bank 1)
P0172	System Too Rich (Bank 1)
P0173	Fuel Trim Malfunction (Bank 2)
P0174	System Too Lean (Bank 2)
P0175	System Too Rich (Bank 2)
P0176	Fuel Compensation Sensor Circuit Malfunction
P0177	Fuel Compensation Sensor CKT Range/Performance
P0178	Fuel Compensation Sensor Circuit Low Input
P0179	Fuel Compensation Sensor Circuit High Input
P0180	Fuel Temperature Sensor A Circuit Malfunction
P0181	Fuel Temperature Sensor A CKT Range/Performance
P0182	Fuel Temperature Sensor A Circuit Low Input
P0183	Fuel Temperature Sensor A Circuit High Input
P0184	Fuel Temperature Sensor A CKT Intermittent
P0185	Fuel Temperature Sensor B Circuit Malfunction
P0186	Fuel Temperature Sensor B CKT Range/Performance
P0187	Fuel Temperature Sensor B Circuit Low Input
P0188	Fuel Temperature Sensor B Circuit High Input
P0189	Fuel Temperature Sensor B CKT Intermittent
P0190	Fuel Rail Pressure Sensor Circuit Malfunction
P0191	Fuel Rail Pressure Sensor CKT Range/Performance

OBDII Generic DTC Definitions	
P0192	Fuel Rail Pressure Sensor Circuit Low Input
P0193	Fuel Rail Pressure Sensor Circuit High Input
P0194	Fuel Rail Pressure Sensor CKT Intermittent
P0195	Engine Oil Temp Sensor Circuit Malfunction
P0196	Engine Oil Temp Sensor CKT Range/Performance
P0197	Engine Oil Temp Sensor Circuit Low Input
P0198	Engine Oil Temp Sensor Circuit High Input
P0199	Engine Oil Temp Sensor CKT Intermittent
P0200	Injector Circuit Open
P0201	Injector Circuit Open Cylinder 1
P0202	Injector Circuit Open Cylinder 2
P0203	Injector Circuit Open Cylinder 3
P0204	Injector Circuit Open Cylinder 4
P0205	Injector Circuit Open Cylinder 5
P0206	Injector Circuit Open Cylinder 6
P0207	Injector Circuit Open Cylinder 7
P0208	Injector Circuit Open Cylinder 8
P0209	Injector Circuit Open Cylinder 9
P0210	Injector Circuit Open Cylinder 10
P0211	Injector Circuit Open Cylinder 11
P0212	Injector Circuit Open Cylinder 12
P0213	Cold Start Injector 1 Malfunction
P0214	Cold Start Injector 2 Malfunction
P0215	Engine Shutoff Solenoid Malfunction
P0216	Injection Timing Control Circuit Malfunction
P0217	Engine Overtemp Condition
P0218	Transmission Overtemp Condition
P0219	Engine Overspeed Condition
P0220	TPS/Pedal Position Sensor/Switch B Circuit Malfunction
P0221	TPS/Pedal Position Sensor/Switch B CKT Range/Performance
P0222	TPS/Pedal Position Sensor/Switch B Circuit Low Input
P0223	TPS/Pedal Position Sensor/Switch B Circuit High Input
P0224	TPS/Pedal Position Sensor/Switch B CKT Intermittent
P0225	TPS/Pedal Position Sensor/Switch C Circuit Malfunction
P0226	TPS/Pedal Position Sensor/Switch C CKT Range/Performance
P0227	TPS/Pedal Position Sensor/Switch C Circuit Low Input

OBDII Generic DTC Definitions	
P0228	TPS/Pedal Position Sensor/Switch C Circuit High Input
P0229	TPS/Pedal Position Sensor/Switch C CKT Intermittent
P0230	Fuel Pump Primary Circuit Malfunction
P0231	Fuel Pump Secondary Circuit Low
P0232	Fuel Pump Secondary Circuit High
P0233	Fuel Pump Secondary Circuit Intermittent Ckt
P0234	Engine Overboost Condition
P0235	Turbo/Super Boost Sensor A Circuit Malfunction
P0236	Turbo/Super Boost Sensor A CKT Range/Performance
P0237	Turbo/Super Boost Sensor A Circuit Low Input
P0238	Turbo/Super Boost Sensor A Circuit High Input
P0239	Turbo/Super Boost Sensor B Circuit Malfunction
P0240	Turbo/Super Boost Sensor B CKT Range/Performance
P0241	Turbo/Super Boost Sensor B Circuit Low Input
P0242	Turbo/Super Boost Sensor B Circuit High Input
P0243	Turbo/Sup Wastegate Solenoid A Malfunction
P0244	Turbo/Sup Wastegate Solenoid A Range/Performance
P0245	Turbo/Sup Wastegate Solenoid A Low
P0246	Turbo/Sup Wastegate Solenoid A High
P0247	Turbo/Sup Wastegate Solenoid B Malfunction
P0248	Turbo /Sup Wastegate Solenoid B Range/Performance
P0249	Turbo/Sup Wastegate Solenoid B Low
P0250	Turbo/Sup Wastegate Solenoid B High
P0251	Injection Pump Metering Control A
P0252	Injection Pump Metering Control A Range/Performance
P0253	Injection Pump Metering Control A Low
P0254	Injection Pump Metering Control A High
P0255	Injection Pump Metering Control A Intermittent (Cam/Rotor/Injector)
P0256	Injection Pump Metering Control B Malfunction (Cam/Rotor/Injector)
P0257	Injection Pump Metering Control B Range/Performance
P0258	Injection Pump Metering Control B Low (Cam/Rotor/Injector)
P0259	Injection Pump Metering Control B High (Cam/Rotor/Injector)
P0260	Injection Pump Metering Control B Intermittent (Cam/Rotor/Injector)
P0261	Cylinder 1 Injector Control Circuit Low
P0262	Cylinder 1 Injector Control Circuit High
P0263	Cylinder 1 Contribution Balance Fault

OBDII Generic DTC Definitions	
P0264	Cylinder 2 Injector Control Circuit Low
P0265	Cylinder 2 Injector Control Circuit High
P0266	Cylinder 2 Contribution Balance Fault
P0267	Cylinder 3 Injector Control Circuit Low
P0268	Cylinder 3 Injector Control Circuit High
P0269	Cylinder 3 Contribution Balance Fault
P0270	Cylinder 4 Injector Control Circuit Low
P0271	Cylinder 4 Injector Control Circuit High
P0272	Cylinder 4 Contribution Balance Fault
P0273	Cylinder 5 Injector Control Circuit Low
P0274	Cylinder 5 Injector Control Circuit High
P0275	Cylinder 5 Contribution Balance Fault
P0276	Cylinder 6 Injector Control Circuit Low
P0277	Cylinder 6 Injector Control Circuit High
P0278	Cylinder 6 Contribution Balance Fault
P0279	Cylinder 7 Injector Control Circuit Low
P0280	Cylinder 7 Injector Control Circuit High
P0281	Cylinder 7 Contribution Balance Fault
P0282	Cylinder 8 Injector Control Circuit Low
P0283	Cylinder 8 Injector Control Circuit High
P0284	Cylinder 8 Contribution Balance Fault
P0285	Cylinder 9 Injector Control Circuit Low
P0286	Cylinder 9 Injector Control Circuit High
P0287	Cylinder 9 Contribution Balance Fault
P0288	Cylinder 10 Injector Control Circuit Low
P0289	Cylinder 10 Injector Control Circuit High
P0290	Cylinder 10 Contribution Balance Fault
P0291	Cylinder 11 Injector Control Circuit Low
P0292	Cylinder 11 Injector Control Circuit High
P0293	Cylinder 11 Contribution Balance Fault
P0294	Cylinder 12 Injector Control Circuit Low
P0295	Cylinder 12 Injector Control Circuit High
P0296	Cylinder 12 Contribution Balance Fault
P0297	Vehicle Overspeed Error
P0298	Engine Oil Temperature Too High
P0299	Turbo/Super Charger UnderBoost

OBDII Generic DTC Definitions	
P0300	Random/Multiple Cylinder Misfire Detected
P0301	Cylinder 1 Misfire Detected
P0302	Cylinder 2 Misfire Detected
P0303	Cylinder 3 Misfire Detected
P0304	Cylinder 4 Misfire Detected
P0305	Cylinder 5 Misfire Detected
P0306	Cylinder 6 Misfire Detected
P0307	Cylinder 7 Misfire Detected
P0308	Cylinder 8 Misfire Detected
P0309	Cylinder 9 Misfire Detected
P0310	Cylinder 10 Misfire Detected
P0311	Cylinder 11 Misfire Detected
P0312	Cylinder 12 Misfire Detected
P0313	Misfire Detected Low Fuel Level
P0314	Misfire Detected Cyl. not Specific
P0315	Crankshaft Position System Variation Not Learned
P0316	Misfire Detected 1st 1000 Revs.
P0317	Rough Road Hardware Not Present
P0318	Rough Road Sensor A Signal Circuit
P0319	Rough Road Sensor B
P0320	Ignition/Dist Engine Speed Input Circuit Malfunction
P0321	Ignition/Dist Engine Speed Input CKT Range/Performance
P0322	Ignition/Dist Engine Speed Input Circuit No Signal
P0323	Ignition/Dist Engine Speed Input CKT Intermittent
P0324	Knock Control System Malfunction
P0325	Knock Sensor 1 Circuit Malfunction Bank 1 or 1 Sensor
P0326	Knock Sensor 1 CKT Range/Performance Bank 1 or 1 Sensor
P0327	Knock Sensor 1 Circuit Low Input Bank 1 or 1 Sensor
P0328	Knock Sensor 1 Circuit High Input Bank 1 or 1 Sensor
P0329	Knock Sensor 1 CKT Intermittent Bank 1 or 1 Sensor
P0330	Knock Sensor 2 Circuit Malfunction (Bank 2)
P0331	Knock Sensor 2 CKT Range/Performance (Bank 2)
P0332	Knock Sensor 2 Circuit Low Input (Bank 2)
P0333	Knock Sensor 2 Circuit High Input (Bank 2)
P0334	Knock Sensor 2 CKT Intermittent (Bank 2)
P0335	Crankshaft Position Sensor A Circuit Malfunction

OBDII Generic DTC Definitions	
P0336	Crankshaft Position Sensor A CKT Range/Performance
P0337	Crankshaft Position Sensor A Circuit Low Input
P0338	Crankshaft Position Sensor A Circuit High Input
P0339	Crankshaft Position Sensor A CKT Intermittent
P0340	Camshaft Position Sensor A - Bank 1 Circuit Malfunction
P0341	Camshaft Position Sensor A - Bank 1 CKT Range/Performance
P0342	Camshaft Position Sensor A - Bank 1 Circuit Low Input
P0343	Camshaft Position Sensor A - Bank 1 Circuit High Input
P0344	Camshaft Position Sensor A - Bank 1 CKT Intermittent
P0345	Camshaft Position Sensor A - Bank 2 Circuit Malfunction
P0346	Camshaft Position Sensor A - Bank 2 CKT Range/Performance
P0347	Camshaft Position Sensor A - Bank 2 Circuit Low Input
P0348	Camshaft Position Sensor A - Bank 2 Circuit High Input
P0349	Camshaft Position Sensor A - Bank 2 CKT Intermittent
P0350	Ignition Coil Primary/Secondary Circuit Malfunction
P0351	Ignition Coil A Primary/Secondary Circuit Malfunction
P0352	Ignition Coil B Primary/Secondary Circuit Malfunction
P0353	Ignition Coil C Primary/Secondary Circuit Malfunction
P0354	Ignition Coil D Primary/Secondary Circuit Malfunction
P0355	Ignition Coil E Primary/Secondary Circuit Malfunction
P0356	Ignition Coil F Primary/Secondary Circuit Malfunction
P0357	Ignition Coil G Primary/Secondary Circuit Malfunction
P0358	Ignition Coil H Primary/Secondary Circuit Malfunction
P0359	Ignition Coil I Primary/Secondary Circuit Malfunction
P0360	Ignition Coil J Primary/Secondary Circuit Malfunction
P0361	Ignition Coil K Primary/Secondary Circuit Malfunction
P0362	Ignition Coil L Primary/Secondary Circuit Malfunction
P0363	Misfire Detected Fueling Disabled
P0365	Camshaft Position Sensor B - Bank 1 Circuit Malfunction
P0366	Camshaft Position Sensor B - Bank 1 CKT Range/Performance
P0367	Camshaft Position Sensor B - Bank 1 Circuit Low Input
P0368	Camshaft Position Sensor B - Bank 1 Circuit High Input
P0369	Camshaft Position Sensor B - Bank 1 CKT Intermittent
P0370	Timing Reference High Resolution Signal A Malfunction
P0371	Timing Reference High Resolution Signal A Too Many Pulses
P0372	Timing Reference High Resolution Signal A Too Few Pulses

OBDII Generic DTC Definitions	
P0373	Timing Reference High Resolution Signal A Erratic Pulses
P0374	Timing Reference High Resolution Signal A No Pulses
P0375	Timing Reference High Resolution Signal B Malfunction
P0376	Timing Reference High Resolution Signal B Too Many Pulses
P0377	Timing Reference High Resolution Signal B Too Few Pulses
P0378	Timing Reference High Resolution Signal B Erratic Pulses
P0379	Timing Reference High Resolution Signal B No Pulses
P0380	Glow Plug/Heater CKT A Malfunction
P0381	Glow Plug/Heater Indicator Circuit Malfunction
P0382	Glow Plug/Heater CKT B Malfunction
P0383	Glow Plug Module Control Circuit Low
P0384	Glow Plug Module Control Circuit High
P0385	Crankshaft Position Sensor B Circuit Malfunction
P0386	Crankshaft Position Sensor B CKT Range/Performance
P0387	Crankshaft Position Sensor B Circuit Low Input
P0388	Crankshaft Position Sensor B Circuit High Input
P0389	Crankshaft Position Sensor B CKT Intermittent
P0390	Camshaft Position Sensor B - Bank 2 Circuit Malfunction
P0391	Camshaft Position Sensor B - Bank 2 CKT Range/Performance
P0392	Camshaft Position Sensor B - Bank 2 Circuit Low Input
P0393	Camshaft Position Sensor B - Bank 2 Circuit High Input
P0394	Camshaft Position Sensor B - Bank 2 CKT Intermittent
P0400	EGR Flow Malfunction
P0401	EGR Flow Insufficient
P0402	EGR Flow Excessive
P0403	EGR Flow Circuit Malfunction
P0404	EGR Flow CKT Range/Performance
P0405	EGR Flow Sensor A Circuit Low Input
P0406	EGR Flow Sensor A Circuit High Input
P0407	EGR Flow Sensor B Circuit Low Input
P0408	EGR Flow Sensor B Circuit High Input
P0409	EGR Flow Sensor A Circuit
P0410	Secondary Air Injection System Malfunction
P0411	Secondary Air Injection System Incorrect Flow
P0412	Secondary Air Injection System Valve A Malfunction
P0413	Secondary Air Injection System Valve A CKT Open

OBDII Generic DTC Definitions	
P0414	Secondary Air Injection System Valve A CKT Short
P0415	Secondary Air Injection System Valve B Malfunction
P0416	Secondary Air Injection System Valve B CKT Open
P0417	Secondary Air Injection System Valve B CKT Short
P0418	Secondary Air Injection System Relay A Malfunction
P0419	Secondary Air Injection System Relay B Malfunction
P0420	Catalyst Efficiency Below Threshold (Bank 1)
P0421	Warm Up Catalyst Below Threshold (Bank 1)
P0422	Main Catalyst Below Threshold (Bank 1)
P0423	Heated Catalyst Below Threshold (Bank 1)
P0424	Heated Catalyst Temp Below Threshold (Bank 1)
P0425	Catalyst Temp. Sensor (Bank 1 Sensor 1)
P0426	Catalyst Temp. Sensor Performance (Bank 1 Sensor 1)
P0427	Catalyst Temp. Sensor Circuit Low (Bank 1 Sensor 1)
P0428	Catalyst Temp. Sensor Circuit High (Bank 1 Sensor 1)
P0429	Catalyst Heater Control (Bank 1)
P0430	Catalyst Efficiency Below Threshold (Bank 2)
P0431	Warm Up Catalyst Below Threshold (Bank 2)
P0432	Main Catalyst Below Threshold (Bank 2)
P0433	Heated Catalyst Below Threshold (Bank 2)
P0434	Heated Catalyst Temp Below Threshold (Bank 2)
P0435	Catalyst Temp. Sensor (Bank 2 Sensor 1)
P0436	Catalyst Temp. Sensor Performance (Bank 2 Sensor 1)
P0437	Catalyst Temp. Sensor Circuit Low (Bank 2 Sensor 1)
P0438	Catalyst Temp. Sensor Circuit High (Bank 2 Sensor 1)
P0439	Catalyst Heater Control (Bank 2)
P0440	EVAP Emission Control System Malfunction
P0441	EVAP Emission Control System Purge Flow Fault
P0442	EVAP Emission Control System Leak (Small)
P0443	EVAP Emission Control System Purge Valve C Fault
P0444	EVAP Emission Control System Purge Valve C Open
P0445	EVAP Emission Control System Purge Valve C Short
P0446	EVAP Emission Control System Vent Circuit Malf
P0447	EVAP Emission Control System Vent Circuit Open
P0448	EVAP Emission Control System Vent Circuit Short
P0449	EVAP Emission Control System Vent Vlv/Sol Malf

OBDII Generic DTC Definitions	
P0450	EVAP Emission Control System Pres Sensor Fault
P0451	EVAP Emission Control System Pres Sensor Range
P0452	EVAP Emission Control System Pres Sensor Low
P0453	EVAP Emission Control System Pres Sensor High
P0454	EVAP Emission Control System Pres Sensor Erratic
P0455	EVAP Emission Control System Leak (Large)
P0456	EVAP Emission Control System Leak Very Small
P0457	EVAP Emission Control System Leak Cap Loose/Off
P0458	EVAP System Canister Purge Sol Circuit Low
P0459	EVAP System Canister Purge Sol Circuit High
P0460	Fuel Level Sensor A Circuit Malfunction
P0461	Fuel Level Sensor A CKT Range/Performance
P0462	Fuel Level Sensor A Circuit Low Input
P0463	Fuel Level Sensor A Circuit High Input
P0464	Fuel Level Sensor A CKT Intermittent
P0465	EVAP Emission Purge Flow Sensor Circuit Malfunction
P0466	EVAP Emission Purge Flow Sensor CKT Range/Performance
P0467	EVAP Emission Purge Flow Sensor Circuit Low Input
P0468	EVAP Emission Purge Flow Sensor Circuit High Input
P0469	EVAP Emission Purge Flow Sensor CKT Intermittent
P0470	Exhaust Pressure Sensor Circuit Malfunction
P0471	Exhaust Pressure Sensor CKT Range/Performance
P0472	Exhaust Pressure Sensor Circuit Low Input
P0473	Exhaust Pressure Sensor Circuit High Input
P0474	Exhaust Pressure Sensor CKT Intermittent
P0475	Exhaust Pressure Control Valve Circuit Malfunction
P0476	Exhaust Pressure Control Valve CKT Range/Performance
P0477	Exhaust Pressure Control Valve Circuit Low Input
P0478	Exhaust Pressure Control Valve Circuit High Input
P0479	Exhaust Pressure Control Valve CKT Intermittent
P0480	Cooling Fan 1 Control Circuit
P0481	Cooling Fan 2 Control Circuit
P0482	Cooling Fan 3 Control Circuit
P0483	Control Fan Rationality Check Malfunction
P0484	Control Fan CKT Over Current
P0485	Control Fan Power/Ground Circuit Malfunction

OBDII Generic DTC Definitions	
P0486	EGR System Sensor B Circuit
P0487	EGR TPS Control Circuit
P0488	EGR TPS Control CKT Range/Performance
P0489	EGR Control Circuit Low
P0490	EGR Control Circuit High
P0491	Secondary Air System (Bank 1)
P0492	Secondary Air System (Bank 2)
P0493	Fan Speed Overspeed
P0494	Fan Speed Low
P0495	Fan Speed High
P0496	EVAP Emission High Purge Flow Fault
P0497	EVAP Emission Low Purge Flow Fault
P0498	EVAP Emission Vent Vlv/Sol Malf Circuit Low
P0499	EVAP Emission Vent Vlv/Sol Malf Circuit High
P0500	Vehicle Speed Sensor A Malfunction
P0501	Vehicle Speed Sensor A Range/Performance
P0502	Vehicle Speed Sensor A Circuit Low Input
P0503	Vehicle Speed Sensor A Erratic/High
P0504	Brake Switch A Brake Switch B Correlation
P0505	Idle Control System Malfunction
P0506	Idle Control System RPM Low
P0507	Idle Control System RPM High
P0508	Idle Control System Circuit Low
P0509	Idle Control System Circuit High
P0510	Closed Throttle Position Switch
P0511	Idle Air Control Circuit
P0512	Starter Signal Circuit
P0513	Immobilizer Incorrect
P0514	Battery Temperature Sensor CKT Range/Performance
P0515	Battery Temperature Sensor Circuit
P0516	Battery Temperature Circuit Low
P0517	Battery Temperature Circuit High
P0518	Idle Air Control CKT Intermittent
P0519	Idle Air Control System Performance
P0520	Engine Oil Pressure Sensor/Switch Circuit Malfunction
P0521	Engine Oil Pressure Sensor/Switch Range/Performance

OBDII Generic DTC Definitions	
P0522	Engine Oil Pressure Sensor/Switch Low Voltage
P0523	Engine Oil Pressure Sensor/Switch High Voltage
P0524	Engine Oil Pressure Too Low
P0525	Cruise Servo CKT Range/Performance
P0526	Fan Speed Sensor Circuit
P0527	Fan Speed Sensor CKT Range/Performance
P0528	Fan Speed Sensor Circuit No Signal
P0529	Fan Speed Sensor CKT Intermittent
P0530	A/C Refrigerant Pressure Sensor A Circuit Malfunction
P0531	A/C Refrigerant Pressure Sensor A CKT Range/Performance
P0532	A/C Refrigerant Pressure Sensor A Circuit Low Input
P0533	A/C Refrigerant Pressure Sensor A Circuit High Input
P0534	A/C Refrigerant Charge Loss
P0535	A/C Evaporator Temperature Sensor Circuit
P0536	A/C Evaporator Temperature Sensor CKT Range/Performance
P0537	A/C Evaporator Temperature Sensor Circuit Low
P0538	A/C Evaporator Temperature Sensor Circuit High
P0539	A/C Evaporator Temperature Sensor CKT Intermittent
P0540	Intake Air Heater A Circuit
P0541	Intake Air Heater A Circuit Low
P0542	Intake Air Heater A Circuit High
P0543	Intake Air Heater A Circuit Open
P0544	Exhaust Gas Temp. Sensor Circuit (Bank 1 Sensor 1)
P0545	Exhaust Gas Temp. Sensor Circuit Low (Bank 1 Sensor 1)
P0546	Exhaust Gas Temp. Sensor Circuit High (Bank 1 Sensor 1)
P0547	Exhaust Gas Temp. Sensor Circuit (Bank 2 Sensor 1)
P0548	Exhaust Gas Temp. Sensor Circuit Low (Bank 2 Sensor 1)
P0549	Exhaust Gas Temp. Sensor Circuit High (Bank 2 Sensor 1)
P0550	Power Steering Pres Sensor Circuit Malfunction
P0551	Power Steering Pres Sensor CKT Range/Performance
P0552	Power Steering Pres Sensor Circuit Low Input
P0553	Power Steering Pres Sensor Circuit High Input
P0554	Power Steering Pres Sensor CKT Intermittent
P0555	Brake Booster Pressure Sensor Circuit
P0556	Brake Booster Pressure Sensor CKT Range/Performance
P0557	Brake Booster Pressure Sensor Circuit Low Input

OBDII Generic DTC Definitions	
P0558	Brake Booster Pressure Sensor Circuit High Input
P0559	Brake Booster Pressure Sensor CKT Intermittent
P0560	System Voltage Malfunction
P0561	System Voltage Unstable
P0562	System Voltage Low
P0563	System Voltage High
P0564	Cruise Control Multi-Function. Input A Signal Error
P0565	Cruise Control On Signal Malfunction
P0566	Cruise Control Off Signal Malfunction
P0567	Cruise Control Resume Signal Malfunction
P0568	Cruise Control Set Signal Malfunction
P0569	Cruise Control Coast Signal Malfunction
P0570	Cruise Control Acceleration Signal Error
P0571	Brake Switch A Circuit Malfunction
P0572	Brake Switch A Circuit Low Input
P0573	Brake Switch A Circuit High Input
P0574	Cruise Control Vehicle Speed Too High
P0575	Cruise Control Circuit Malfunction
P0576	Cruise Control Circuit Low Input
P0577	Cruise Control Circuit High Input
P0578	Cruise Control Multi-Function Input A Circuit Stuck
P0579	Cruise Control Multi-Function Input A CKT Range/Performance
P0580	Cruise Control Multi-Function Input A Circuit Low
P0581	Cruise Control Multi-Function Input A Circuit High
P0582	Cruise Control Vacuum Control Circuit Open
P0583	Cruise Control Vacuum Control Circuit Low
P0584	Cruise Control Vacuum Control Circuit High
P0585	Cruise Control Multi-Function Input Correlation
P0586	Cruise Control Vent Control Circuit Open
P0587	Cruise Control Vent Control Circuit Low
P0588	Cruise Control Vent Control Circuit High
P0589	Cruise Control Multi-Function Input B Circuit
P0590	Cruise Control Multi-Function Input B Circuit Stuck
P0591	Cruise Control Multi-Function Input B CKT Range/Performance
P0592	Cruise Control Multi-Function Input B Circuit Low
P0593	Cruise Control Multi-Function Input B Circuit High

OBDII Generic DTC Definitions	
P0594	Cruise Control Servo Control Circuit Open
P0595	Cruise Control Servo Control Circuit Low
P0596	Cruise Control Servo Control Circuit High
P0597	Cruise Control Circuit Open
P0598	Cruise Control Circuit Low
P0599	Cruise Control Circuit High
P0600	Serial Communication Link Malfunction
P0601	Internal Control Module Memory Check Sum Error
P0602	Control Module Programming Error
P0603	PCM Keep Alive Memory (KAM) Error
P0604	PCM Random Access Memory (RAM) Error
P0605	PCM Read Only Memory (ROM) Error
P0606	PCM Processor Fault
P0607	Control Module Performance
P0608	Control Module VSS Output A Malfunction
P0609	Control Module VSS Output B Malfunction
P0610	Control Module Vehicle Options Malfunction
P0611	Injector Control Module Performance
P0612	Injector Control Module Relay Control
P0613	TCM Processor Fault
P0614	ECM/TCM Incompatible
P0615	Starter Relay Circuit
P0616	Starter Relay Circuit Low
P0617	Starter Relay Circuit High
P0618	Alternative Fuel Module (KAM) Error
P0619	Alternative Fuel Module Memory
P0620	Generator Control Malfunction
P0621	Generator L-Term. Lamp Control
P0622	Generator F-Term. Field F Control
P0623	Generator Lamp Control Circuit
P0624	Fuel Cap Lamp Circuit
P0625	Generator F-Term. Circuit Low
P0626	Generator F-Term. Circuit High
P0627	Fuel Pump A Control Circuit Open
P0628	Fuel Pump A Control Circuit Low
P0629	Fuel Pump A Control Circuit High

OBDII Generic DTC Definitions	
P0630	PCM VIN Not Program. Or Mismatch
P0631	TCM VIN Not Program. Or Mismatch
P0632	Odometer Code Not Programmed ECM/PCM
P0633	Immobilizer Code Not Programmed ECM/PCM
P0634	PCM/ECM/TCM Internal Temp. Too High
P0635	Power Steering Control Circuit
P0636	Power Steering Control Circuit Low
P0637	Power Steering Control Circuit High
P0638	Throttle Actuator Range/Performance (Bank 1)
P0639	Throttle Actuator Range/Performance (Bank 2)
P0640	Intake Air Heater Control Circuit
P0641	Sensor A Reference Voltage Circuit Open
P0642	Sensor A Reference Voltage Circuit Low
P0643	Sensor A Reference Voltage Circuit High
P0644	Driver Display Serial Communication Link
P0645	A/C Clutch Relay Control Circuit
P0646	A/C Clutch Relay Control Circuit Low
P0647	A/C Clutch Relay Control Circuit High
P0648	Immobilizer Lamp Circuit
P0649	Cruise Control Lamp Circuit
P0650	MIL Control Circuit Malfunction
P0651	Sensor B Reference Voltage Circuit Open
P0652	Sensor B Reference Voltage Circuit Low
P0653	Sensor B Reference Voltage Circuit High
P0654	Engine RPM Circuit Malfunction
P0655	Engine Hot Lamp Output Circuit Malfunction
P0656	Fuel Level Output Circuit Malfunction
P0657	Actuator Supply Voltage A Circuit Open
P0658	Actuator Supply Voltage A Circuit Low
P0659	Actuator Supply Voltage A Circuit High
P0660	Intake Man Tuning Control CKT Open (Bank 1)
P0661	Intake Man Tuning Control CKT Low (Bank 1)
P0662	Intake Man Tuning Control CKT High (Bank 1)
P0663	Intake Man Tuning Control CKT Open (Bank 2)
P0664	Intake Man Tuning Control CKT Low (Bank 2)
P0665	Intake Man Tuning Control CKT High (Bank 2)

OBDII Generic DTC Definitions	
P0666	PCM/ECM/TCM Internal Temp. Sensor Circuit
P0667	PCM/ECM/TCM Internal Temp. Sensor Range/Performance
P0668	PCM/ECM/TCM Internal Temp. Sensor Circuit Low
P0669	PCM/ECM/TCM Internal Temp. Sensor Circuit High
P0670	Glow Plug/Heater Module Control
P0671	Glow Plug/Heater Cylinder 1
P0672	Glow Plug/Heater Cylinder 2
P0673	Glow Plug/Heater Cylinder 3
P0674	Glow Plug/Heater Cylinder 4
P0675	Glow Plug/Heater Cylinder 5
P0676	Glow Plug/Heater Cylinder 6
P0677	Glow Plug/Heater Cylinder 7
P0678	Glow Plug/Heater Cylinder 8
P0679	Glow Plug/Heater Cylinder 9
P0680	Glow Plug/Heater Cylinder 10
P0681	Glow Plug/Heater Cylinder 11
P0682	Glow Plug/Heater Cylinder 12
P0683	Glow Plug/Heater Module Communication Problem
P0684	Glow Plug/Heater Communication Problem CKT Range/Performance
P0685	ECM/PCM Power Relay Control Circuit Open
P0686	ECM/PCM Power Relay Control Circuit Low
P0687	ECM/PCM Power Relay Control Circuit High
P0688	ECM/PCM Power Relay Sense Circuit Open
P0689	ECM/PCM Power Relay Sense Circuit Low
P0690	ECM/PCM Power Relay Sense Circuit High
P0691	Fan 1 Control Circuit Low
P0692	Fan 1 Control Circuit High
P0693	Fan 2 Control Circuit Low
P0694	Fan 2 Control Circuit High
P0695	Fan 3 Control Circuit Low
P0696	Fan 3 Control Circuit High
P0697	Sensor C Reference Voltage Circuit Open
P0698	Sensor C Reference Voltage Circuit Low
P0699	Sensor C Reference Voltage Circuit High
P0700	Trans Control Sys Malfunction
P0701	Trans Control Sys Range/Performance

OBDII Generic DTC Definitions	
P0702	Trans Control Sys Electrical
P0703	Brake Switch B Circuit Malfunction
P0704	Clutch Switch Input Circuit Malfunction
P0705	Trans Range Sensor Circuit Malfunction (PRNDL Input)
P0706	Trans Range Sensor CKT Range/Performance
P0707	Trans Range Sensor Circuit Low Input
P0708	Trans Range Sensor Circuit High Input
P0709	Trans Range Sensor CKT Intermittent
P0710	Transmission Fluid Temperature Sensor Circuit Malfunction
P0711	Trans Fluid Temp Sensor A CKT Range/Performance
P0712	Trans Fluid Temp Sensor A Circuit Low Input
P0713	Trans Fluid Temp Sensor A Circuit High Input
P0714	Trans Fluid Temp Sensor A CKT Intermittent
P0715	Input/Turbine Speed Sensor A Circuit Malfunction
P0716	Input/Turbine Speed Sensor A CKT Range/Performance
P0717	Input/Turbine Speed Sensor A Circuit No Signal
P0718	Input/Turbine Speed Sensor A CKT Intermittent
P0719	Brake Switch B Circuit Low Input
P0720	Output Speed Sensor Circuit Malfunction
P0721	Output Speed Sensor Circuit Range/Performance
P0722	Output Speed Sensor Circuit No Signal
P0723	Output Speed Sensor CKT Intermittent
P0724	Brake Switch B Circuit High Input
P0725	Engine Speed Sensor Circuit Malfunction
P0726	Engine Speed Sensor CKT Range/Performance
P0727	Engine Speed Sensor Circuit No Signal
P0728	Engine Speed Sensor CKT Intermittent
P0729	Gear 6 Ratio Incorrect
P0730	Gear Ratio Incorrect
P0731	Gear 1 Ratio Incorrect
P0732	Gear 2 Ratio Incorrect
P0733	Gear 3 Ratio Incorrect
P0734	Gear 4 Ratio Incorrect
P0735	Gear 5 Ratio Incorrect
P0736	Reverse Ratio Incorrect
P0737	TCM Engine Speed Output Circuit

OBDII Generic DTC Definitions	
P0738	TCM Engine Speed Output Circuit Low
P0739	TCM Engine Speed Output Circuit High
P0740	TCC Circuit Malfunction
P0741	Torque Converter CKT Performance Or Stuck Off
P0742	Torque Converter Circuit Stuck On
P0743	Torque Converter Circuit Electrical
P0744	Torque Converter CKT Intermittent
P0745	Pres Control Sol. A Circuit Malfunction
P0746	Pres Control Sol. A CKT Performance Or Stuck Off
P0747	Pres Control Sol. A Circuit Stuck On
P0748	Pres Control Sol. A Circuit Electrical
P0749	Pres Control Sol. A CKT Intermittent
P0750	Shift Solenoid A Malfunction
P0751	Shift Solenoid A CKT Performance Or Stuck Off
P0752	Shift Solenoid A Circuit Stuck On
P0753	Shift Solenoid A Circuit Electrical
P0754	Shift Solenoid A CKT Intermittent
P0755	Shift Solenoid B Malfunction
P0756	Shift Solenoid B CKT Performance Or Stuck Off
P0757	Shift Solenoid B Circuit Stuck On
P0758	Shift Solenoid B Circuit Electrical
P0759	Shift Solenoid B CKT Intermittent
P0760	Shift Solenoid C Malfunction
P0761	Shift Solenoid C CKT Performance Or Stuck Off
P0762	Shift Solenoid C Circuit Stuck On
P0763	Shift Solenoid C Circuit Electrical
P0764	Shift Solenoid C CKT Intermittent
P0765	Shift Solenoid D Malfunction
P0766	Shift Solenoid D CKT Performance Or Stuck Off
P0767	Shift Solenoid D Circuit Stuck On
P0768	Shift Solenoid D Circuit Electrical
P0769	Shift Solenoid D CKT Intermittent
P0770	Shift Solenoid E Malfunction
P0771	Shift Solenoid E CKT Performance Or Stuck Off
P0772	Shift Solenoid E Circuit Stuck On
P0773	Shift Solenoid E Circuit Electrical

OBDII Generic DTC Definitions	
P0774	Shift Solenoid E CKT Intermittent
P0775	Pres Ctrl Sol. B Circuit Malfunction
P0776	Pres Ctrl Sol. B CKT Performance Or Stuck Off
P0777	Pres Ctrl Sol. B Circuit Stuck On
P0778	Pres Ctrl Sol. B Circuit Electrical
P0779	Pres Ctrl Sol. B CKT Intermittent
P0780	Shift Malfunction
P0781	1-2 Shift Malfunction
P0782	2-3 Shift Malfunction
P0783	3-4 Shift Malfunction
P0784	4-5 Shift Malfunction
P0785	Shift/Timing Solenoid Malfunction
P0786	Shift/Timing Solenoid Range/Performance
P0787	Shift/Timing Solenoid Low
P0788	Shift/Timing Solenoid High
P0789	Shift/Timing Solenoid Intermittent Ckt
P0790	Normal/Performance Switch Circuit Malfunction
P0791	Intermediate Shaft Speed Sensor A Circuit
P0792	Intermediate Shaft Speed Sensor A Circuit Range/Performance
P0793	Intermediate Shaft Speed Sensor A Circuit No Signal
P0794	Intermediate Shaft Speed Sensor A CKT Intermittent
P0795	Pres Ctrl Sol. C Malfunction
P0796	Pres Ctrl Sol. C CKT Performance Or Stuck Off
P0797	Pres Ctrl Sol. C Circuit Stuck On
P0798	Pres Ctrl Sol. C Circuit Electrical
P0799	Pres Ctrl Sol. C CKT Intermittent
P0800	Transfer Case Control System MIL Request
P0801	Reverse Inhibit Control Circuit Malfunction
P0802	Trans Control Sys MIL Request Circuit Open
P0803	1-4 Upshift (Skip Shift) Solenoid Circuit Malfunction
P0804	1-4 Upshift (Skip Shift) Lamp Circuit Malfunction
P0805	Clutch Position Sensor Circuit Malfunction
P0806	Clutch Position Sensor Circuit Range/Performance
P0807	Clutch Position Sensor Circuit Low
P0808	Clutch Position Sensor Circuit High
P0809	Clutch Position Sensor Circuit Intermittent Ckt

OBDII Generic DTC Definitions	
P0810	Clutch Position Control Malfunction
P0811	Clutch Slippage Excessive
P0812	Reverse Input Circuit Malfunction
P0813	Reverse Output Circuit Malfunction
P0814	Trans Range Display Circuit Malfunction
P0815	Upshift Switch Circuit Malfunction
P0816	Downshift Switch Circuit Malfunction
P0817	Starter Disable Circuit
P0818	Driveline Disconnect. Switch Input
P0819	Up/Down Shift SW Transmission Range Correlation
P0820	Gear Lever X-Y Sensor Circuit
P0821	Gear Lever X Sensor Circuit
P0822	Gear Lever Y Sensor Circuit
P0823	Gear Lever X Sensor Circuit Intermittent Ckt
P0824	Gear Lever Y Sensor Circuit Intermittent Ckt
P0825	Gear Lever Push/Pull Switch (Shift Anticipate)
P0826	Upshift Switch Downshift Switch Circuit
P0827	Upshift Switch Downshift Switch Circuit Low
P0828	Upshift Switch Downshift Switch Circuit High
P0829	5-6 Shift
P0830	Clutch Position Switch A Circuit Malfunction
P0831	Clutch Position Switch A Circuit Low
P0832	Clutch Position Switch A Circuit High
P0833	Clutch Position Switch B Circuit Malfunction
P0834	Clutch Position Switch B Circuit Low
P0835	Clutch Position Switch B Circuit High
P0836	4 Wheel Drive Switch Circuit Malfunction
P0837	4 Wheel Drive Switch CKT Range/Performance
P0838	4 Wheel Drive Switch Circuit Low
P0839	4 Wheel Drive Switch Circuit High
P0840	Trans Fluid Press Sensor/Switch A Circuit Malfunction
P0841	Trans Fluid Press Sensor/Switch A CKT Range/Performance
P0842	Trans Fluid Press Sensor/Switch A Circuit Low
P0843	Trans Fluid Press Sensor/Switch A Circuit High
P0844	Trans Fluid Press Sensor/Switch A CKT Intermittent
P0845	Trans Fluid Press Sensor/Switch B Circuit Malfunction

OBDII Generic DTC Definitions	
P0846	Trans Fluid Press Sensor/Switch B CKT Range/Performance
P0847	Trans Fluid Press Sensor/Switch B Circuit Low
P0848	Trans Fluid Press Sensor/Switch B Circuit High
P0849	Trans Fluid Press Sensor/Switch B CKT Intermittent
P0850	Park/Neutral Switch Input Circuit
P0851	Park/Neutral Switch Circuit Low Input
P0852	Park/Neutral Switch Circuit High Input
P0853	Drive Switch Input Circuit
P0854	Drive Switch Circuit Low Input
P0855	Drive Switch Circuit High Input
P0856	Traction Control Input Signal
P0857	Traction Control Input Signal Range/Performance
P0858	Traction Control Input Signal Low
P0859	Traction Control Input Signal High
P0860	Gear Shift Module Communications Circuit
P0861	Gear Shift Module Communications Circuit Low
P0862	Gear Shift Module Communications Circuit High
P0863	TCM Communications Circuit
P0864	TCM Communications CKT Range/Performance
P0865	TCM Communications Circuit Low
P0866	TCM Communications Circuit High
P0867	Trans Fluid Press
P0868	Trans Fluid Press Low
P0869	Trans Fluid Press High
P0870	Trans Fluid Press Sensor/Switch C Circuit
P0871	Trans Fluid Press Sensor/Switch C CKT Range/Performance
P0872	Trans Fluid Press Sensor/Switch C Circuit Low
P0873	Trans Fluid Press Sensor/Switch C Circuit High
P0874	Trans Fluid Press Sensor/Switch C CKT Intermittent
P0875	Trans Fluid Press Sensor/Switch D Circuit
P0876	Trans Fluid Press Sensor/Switch D CKT Range/Performance
P0877	Trans Fluid Press Sensor/Switch D Circuit Low
P0878	Trans Fluid Press Sensor/Switch D Circuit High
P0879	Trans Fluid Press Sensor/Switch D CKT Intermittent
P0880	TCM Power Input Signal
P0881	TCM Power Input Signal Range/Performance

OBDII Generic DTC Definitions	
P0882	TCM Power Input Signal Low
P0883	TCM Power Input Signal High
P0884	TCM Power Input Signal CKT Intermittent
P0885	TCM Power Relay Control Circuit Open
P0886	TCM Power Relay Control Circuit Low
P0887	TCM Power Relay Control Circuit High
P0888	TCM Power Relay Sense Circuit
P0889	TCM Power Relay Sense CKT Range/Performance
P0890	TCM Power Relay Sense Circuit Low
P0891	TCM Power Relay Sense Circuit High
P0892	TCM Power Relay Sense CKT Intermittent
P0893	Multiple Gears Engaged
P0894	Transmission Comp. Slipping
P0895	Shift Time Too Short
P0896	Shift Time Too Long
P0897	Transmission Fluid Deteriorated
P0898	Transmission Ctrl. MIL Request Circuit Low
P0899	Transmission Ctrl. MIL Request Circuit High
P0900	Clutch Actuator Circuit Open
P0901	Clutch Actuator CKT Range/Performance
P0902	Clutch Actuator Circuit Low
P0903	Clutch Actuator Circuit High
P0904	Gate Select Position Circuit
P0905	Gate Select Position CKT Range/Performance
P0906	Gate Select Position Circuit Low
P0907	Gate Select Position Circuit High
P0908	Gate Select Position CKT Intermittent
P0909	Gate Select Control Error
P0910	Gate Select Actuator Circuit Open
P0911	Gate Select Actuator CKT Range/Performance
P0912	Gate Select Actuator Circuit Low
P0913	Gate Select Actuator Circuit High
P0914	Gear Shift Position Circuit
P0915	Gear Shift Position CKT Range/Performance
P0916	Gear Shift Position Circuit Low
P0917	Gear Shift Position Circuit High

OBDII Generic DTC Definitions	
P0918	Gear Shift Position CKT Intermittent
P0919	Gear Shift Position Control Error
P0920	Gear Shift Forward Actuator Circuit Open
P0921	Gear Shift Forward Actuator CKT Range/Performance
P0922	Gear Shift Forward Actuator Circuit Low
P0923	Gear Shift Forward Actuator Circuit High
P0924	Gear Shift Reverse Actuator Circuit Open
P0925	Gear Shift Reverse Actuator CKT Range/Performance
P0926	Gear Shift Reverse Actuator Circuit Low
P0927	Gear Shift Reverse Actuator Circuit High
P0928	Gear Shift Lock Solenoid Ctrl Circuit Open
P0929	Gear Shift Lock Solenoid Ctrl CKT Range/Performance
P0930	Gear Shift Lock Solenoid Ctrl Circuit Low
P0931	Gear Shift Lock Solenoid Ctrl Circuit High
P0932	Hydraulic Pressure Sensor Circuit
P0933	Hydraulic Pressure Sensor CKT Range/Performance
P0934	Hydraulic Pressure Sensor Circuit Low
P0935	Hydraulic Pressure Sensor Circuit High
P0936	Hydraulic Pressure Sensor CKT Intermittent
P0937	Hydraulic Oil Temp Sensor Circuit
P0938	Hydraulic Oil Temp Sensor CKT Range/Performance
P0939	Hydraulic Oil Temp Sensor Circuit Low
P0940	Hydraulic Oil Temp Sensor Circuit High
P0941	Hydraulic Oil Temp Sensor CKT Intermittent
P0942	Hyd. Pressure Unit
P0943	Hyd. Pressure Unit Cycling Too Short
P0944	Hyd. Pressure Unit Loss of Pressure
P0945	Hyd. Pump Relay Circuit Open
P0946	Hyd. Pump Relay CKT Range/Performance
P0947	Hyd. Pump Relay Circuit Low
P0948	Hyd. Pump Relay Circuit High
P0949	Auto Shift Adaptive Learning Not Complete
P0950	Auto Shift Manual Control Circuit
P0951	Auto Shift Manual Control CKT Range/Performance
P0952	Auto Shift Manual Control Circuit Low
P0953	Auto Shift Manual Control Circuit High

OBDII Generic DTC Definitions	
P0955	Auto Shift Manual Mode Circuit
P0956	Auto Shift Manual Mode CKT Range/Performance
P0957	Auto Shift Manual Mode Circuit Low
P0958	Auto Shift Manual Mode Circuit High
P0959	Auto Shift Manual Mode CKT Intermittent
P0960	Pressure Control Solenoid A Control Circuit Open
P0961	Pressure Control Solenoid A Control CKT Range/Performance
P0962	Pressure Control Solenoid A Control Circuit Low
P0963	Pressure Control Solenoid A Control Circuit High
P0964	Pressure Control Solenoid B Control Circuit Open
P0965	Pressure Control Solenoid B Control CKT Range/Performance
P0966	Pressure Control Solenoid B Control Circuit Low
P0967	Pressure Control Solenoid B Control Circuit High
P0968	Pressure Control Solenoid C Control Circuit Open
P0969	Pressure Control Solenoid C Control CKT Range/Performance
P0970	Pressure Control Solenoid C Control Circuit Low
P0971	Pressure Control Solenoid C Control Circuit High
P0972	Shift Solenoid A Control CKT Range/Performance
P0973	Shift Solenoid A Control Circuit Low
P0974	Shift Solenoid A Control Circuit High
P0975	Shift Solenoid B Control CKT Range/Performance
P0976	Shift Solenoid B Control Circuit Low
P0977	Shift Solenoid B Control Circuit High
P0978	Shift Solenoid C Control CKT Range/Performance
P0979	Shift Solenoid C Control Circuit Low
P0980	Shift Solenoid C Control Circuit High
P0981	Shift Solenoid D Control CKT Range/Performance
P0982	Shift Solenoid D Control Circuit Low
P0983	Shift Solenoid D Control Circuit High
P0984	Shift Solenoid E Control CKT Range/Performance
P0985	Shift Solenoid E Control Circuit Low
P0986	Shift Solenoid E Control Circuit High
P0987	Trans Fluid Press Sensor/Switch E Circuit
P0988	Trans Fluid Press Sensor/Switch E CKT Range/Performance
P0989	Trans Fluid Press Sensor/Switch E Circuit Low
P0990	Trans Fluid Press Sensor/Switch E Circuit High

OBDII Generic DTC Definitions	
P0991	Trans Fluid Press Sensor/Switch E CKT Intermittent
P0992	Trans Fluid Press Sensor/Switch F Circuit
P0993	Trans Fluid Press Sensor/Switch F CKT Range/Performance
P0994	Trans Fluid Press Sensor/Switch F Circuit Low
P0995	Trans Fluid Press Sensor/Switch F Circuit High
P0996	Trans Fluid Press Sensor/Switch F CKT Intermittent
P0997	Shift Solenoid F Control CKT Range/Performance
P0998	Shift Solenoid F Control Circuit Low
P0999	Shift Solenoid F Control Circuit High

5.2 Part Of OBD2 Manufacturer Specific DTC Definitions

VEHICLE MANUFACTURER: CHRYSLER

CHRYSLER (P1016-P1043)

CODE	DEFINITION
P1000	Ignition Circ Low
P1000	Ignition Circ Low
P1004	ECU Battery Feed & Power Grounds
P1005	Sys Ground Circ
P1006	EGR/EVAP Solenoid Circ Low
P1007	EGR/EVAP Solenoid Circ Hi
P1008	Power Steering Circ Low
P1009	Power Steering Circ Hi
P1012	MPA Circ Low
P1013	MPA Circ Hi
P1014	Fuel Pump Circ Low
P1015	Fuel Pump Circ Hi
P1016	Charge Air Temp Circ
P1017	Charge Air Temp Circ Hi
P1018	Serial Data Circ
P1019	Power Latch Not Set
P1021	Engine Failed To Start Due To Mechanical,Fuel or Ignition Conditions
P1022	Starter Relay Circ Low
P1024	ECU Start Circ Low
P1025	WOT Circ Low
P1026	WOT Circ Hi
P1027	ECU Sees Wide Open Throttle
P1028	ECU Does Not See Wide Open Throttle
P1029	ISA Closed Throttle Circ Low
P1030	ISA Closed Throttle Circ Hi
P1031	ECU Sees Closed Throttle
P1032	ECU Does Not See Closed Throttle
P1033	ISA Circs
P1037	TP Sens Circ Reads Low
P1038	Park/Neutral Line Hi
P1039	Park/Neutral Line Low

CODE	DEFINITION
P1040	Latched B+ Line Low
P1041	Latched B+ Line Hi
P1042	No Latched B+ 1/2 Volt Drop
P1043	Shift Lamp Circ Grounded
P1044	D2 1 Circ Low (A/T) or Upshift Lamp Circ (M/T) or Shift Lamp Circ Hi
P1045	Shift Lamp Circ
P1047	Wrong ECU
P1048	M/T Vehicle Configuration
P1049	A/T Vehicle Configuration
P1050	Idle RPM Low
P1051	Idle RPM Hi
P1052	MAP Sens Out Of Limits
P1053	Change In MAP Reading Out Of Limits
P1054	Coolant Sens & 5V Supply for TP Sens/MAP Circs Low
P1055	Coolant Sens Circ Hi
P1056	Inactive Coolant Temp Sens
P1059	A/C Request Circ Low
P1060	A/C Request Circ Hi
P1061	A/C Select Circ Low
P1062	A/C Select Circ Hi
P1063	A/C Clutch Circ Low
P1064	A/C Clutch Circ Hi & Power Steering Input
P1068	Latch Relay Circ Hi
P1069	No Tach
P1074	ECU Does Not See Speed Sens
P1105	Open or shorted condition detected in the baro read solenoid control circuit
P1106	MAP Sens Circ Interm Hi Voltage
P1107	MAP Sens Circ Interm Low Voltage
P1110	Decreased Engine Perf Due To Hi Intake Air Temp
P1111	IAT Sens Circ Interm Hi Voltage
P1112	IAT Sens Circ Interm Low Voltage
P1114	ECT Sens Circ Interm Low Voltage
P1115	ECT Sens Circ Interm Hi Voltage
P1121	TPS Circ Interm Hi Voltage
P1122	TPS Circ Interm Low Voltage

CODE	DEFINITION
P1125	Accelerator Pedal Pos Sys
P1133	HO2S Insufficient Switching Bank1 Sens1
P1134	HO2S Insufficient Transition Time Ratio Bank1 Sens1
P1153	HO2S Insufficient Switching Bank2 Sens1
P1154	HO2S Insufficient Transition Time Ratio Bank2 Sens 1
P1180	Decreased Engine Perf Due To Hi Inj Pump Fuel Temp
P1191	Intake Air Duct Leak
P1192	Inlet Air Temp Sens Voltage Low
P1193	Inlet Air Temp Voltage Hi
P1194	02 Heater Perf
P1195	1/1 02 Sens Slow During Catalyst Monitor
P1196	2/1 02 Sens Slow During Catalyst Monitor
P1197	1/2 02 Sens Slow During Catalyst Monitor
P1198	Radiator Temp Sens Volts Too Hi
P1199	Radiator Temp Sens Volts Too Low
P1214	Inj Pump Timing Offset
P1216	Fuel Solenoid Response Time Too Short
P1217	Fuel Solenoid Response Time Too Long
P1218	Inj Pump Calibration Circ
P1243	Open or shorted condition detected in the turbocharger surge valvesolenoid control
P1271	Accelerator Pedal Pos Sens1-2 Correlation
P1272	Accelerator Pedal Pos Sens2-3 Correlation
P1273	Accelerator Pedal Pos Sens1-3 Correlation
P1275	Accelerator Pedal Pos Sens1 Circ
P1277	Accelerator Pedal Pos Sens1 Low Voltage
P1278	Accelerator Pedal Pos Sens1 Hi Voltage
P1280	Accelerator Pedal Pos Sens2 Circ
P1281	Engine is Cold Too Long
P1282	Accelerator Pedal Pos Sens2 Low Voltage or Fuel Pump Relay Ctrl Circ
P1283	Accelerator Pedal Pos Sens2 Hi Voltage or Idle Select Signal Invalid
P1284	Fuel Inj Pump Battery Voltage Out Of Range
P1285	Accelerator Pedal Pos Sens3 Circ or Fuel Inj Pump Ctrller Always On
P1286	Accelerator Pos Sens Supply Voltage Too Hi
P1287	Accelerator Pedal Pos Sens3 Low Voltage or Fuel Inj Pump CtrlSupply Voltage Low

CODE	DEFINITION
P1288	Accelerator Pedal Pos Sens3 Hi Voltage or Intake Manif Short Runner Solenoid Circ
P1289	Manif Tune Valve Solenoid Circ
P1290	CNG Fuel Sys Press Too Hi
P1291	No Temp Rise Seen From Intake Heaters
P1292	CNG Press Sens Voltage Too Hi
P1293	CNG Press Sens Voltage Too Low
P1294	Target Idle Not Reached
P1295	No 5Vs to Throttle Pos Sens
P1296	No 5Vs to MAP Sens
P1297	No Change in MAP from Start To Run
P1298	Lean Operation at Wide Open Throttle
P1299	Vacuum Leak Found (IAC Fully Seated)
P1336	Crank Pos Sys Variation Not Learned
P1345	Crank Pos/Camshaft Pos Correlation
P1351	Ignition Ctrl Circ Hi Voltage
P1361	Ignition Ctrl Circ Low Voltage
P1380	Electronic Brake Ctrl Rough Road Data Unusable
P1381	Misfire Detected-No Electronic Brake Ctrl Data
P1388	Auto Shutdown Relay Ctrl Circ
P1389	No ASD Relay Output Voltage at PCM
P1390	Timing Belt Skipped 1 Tooth or More
P1391	Interm Loss of CMP or CKP
P1398	Misfire Adaptive Numerator at Limit
P1399	Wait to Start Lamp Circ
P1403	No 5Vs to EGR Sens
P1404	EGR Valve Closed Pintle Pos
P1406	EGR Valve Pos
P1409	EGR Valve Sys leak
P1415	AIR Sys Bank1
P1416	AIR Sys Bank1
P1441	Evap Emissions Flow During Non-Purge
P1475	Auxiliary 5V Supply Voltage Hi
P1476	Too Little Sec Air
P1477	Too Much Sec Air
P1478	Battery Temp Sens Volts Out of Limit

CODE	DEFINITION
P1479	Trans Fan Relay Circ
P1480	PCV Solenoid Circ
P1481	EATX Misfire RPM Signal out of Range
P1482	Catalyst Temp Sens Circ Shorted Low
P1483	Catalyst Temp Sens Circ Shorted Hi
P1484	Catalytic Conv Overheat Detected
P1485	Air Inj Solenoid Circ
P1486	Eva Leak Monitor Pinched Hose Found
P1487	Hi Speed Radiator Fan CTRL Relay Circ
P1488	Auxiliary 5V Supply Output Too Low
P1489	Hi Speed Fan CTRL Relay Circ
P1490	Low Speed Fan CTRL Relay Circ
P1491	Radiator Fan Ctrl Relay Circ
P1492	Ambient/Battery Temp Sens Volts Too Hi
P1493	Ambient/Battery Temp Sens Volts Too Low
P1494	Leak Detection Pump Switch or Mechanical Fault
P1495	Leak Detection Pump Solenoid Circ
P1496	5V Supply,Output Too Low
P1498	Hi Speed Radiator Fan Ground CTRL Relay Circ
P1499	Open or shorted condition detected in the hydraulic cooling fan solenoid control
P1508	IAC Sys Low RPM
P1509	IAC Sys Hi RPM
P1594	Charging Sys Voltage Too Hi
P1595	Speed Ctrl Solenoid Circs
P1596	Speed Ctrl Switch Always Hi
P1597	Speed Ctrl Switch Always Low
P1598	A/C Press Sens Volts Too Hi
P1599	A/C Press Sens Volts Too Low
P1602	PCM Not Programmed
P1621	PCM Memory Perf or Write
P1626	Vehicle Theft Sys Ctrl Loss of Data
P1627	A/D Perf
P1630	Vehicle Theft Sys PCM in Learn Mode
P1631	Vehicle Theft Sys Improper Password
P1635	5V Ref Circ

CODE	DEFINITION
P1639	5V Ref Circ
P1641	MIL Ctrl Circ
P1643	Wait To Start Lamp Ctrl Circ
P1646	5V Ref (C) Circ
P1652	J1850 Comms Bus
P1653	EGR Vent Solenoid Ctrl Circ
P1654	Service Throttle Soon Lamp Ctrl Circ
P1655	EGR Solenoid Ctrl Circ
P1656	Wastegate Solenoid Ctrl Circ
P1680	Clutch Released Switch Circ
P1681	No I/P Cluster CCD/J1850 Messages Received
P1682	Charging Sys Voltage Too Low
P1683	Speed Ctrl Power Relay; or S/C 12v Driver CKT
P1684	Battery Disconnected in the last 50 Starts
P1685	Skim Invalid Key
P1686	No SKIM BUS Messages Received
P1687	No Cluster BUS Message
P1688	Internal Fuel Inj Pump Ctrller Failure
P1689	No Comm between ECM & Inj Pump Mod
P1690	CKP Sens Does Not Agree with ECM CKP Sens
P1691	Fuel Sys ESS RPM Error
P1692	DTC Set In ECM
P1693	DTC Detected in Companion JTEC Mod
P1694	No BUS Message Received from ECM Mod
P1695	No CCD/J1850 Messages from the Body Ctrl Mod.
P1696	PCM Failure EEPROM Write Denied
P1697	PCM Failure SRI Mile Not Stored
P1698	No CCD/J1850 Message From TCM/PCM
P1699	No CCD/J1850 Messages received from the Climate Control Module(CCM)
P1719	Skip Shift Solenoid Circ
P1740	TCC or O/D Solenoid Perf
P1756	Gov Press Not Equal to Target @ not15-20 PSI
P1757	Gov Press above 3 PSI in gear with 0 MPH
P1762	Gov Press Sens Offset Volts Too Low or Hi
P1763	Governor Press Sens Volts Too Hi

CODE	DEFINITION
P1764	Governor Press Sens Volts Too Low
P1765	Trans 12 Volt Supply Relay CTRL Circ
P1830	Open or shorted condition detected in the clutch pedal switch over-ride relay control
P1899	P/N Switch Stuck in Park or in Gear
P1100	BARO Sensor Circuit malfunction
P1120	Accelerator Pedal Position Sensor Circuit Malfunction
P1121	Accelerator Pedal Position Sensor Range/Performance Problem
P1125	Throttle Control Motor Circuit Malfunction
P1126	Magnetic Clutch Circuit Malfunction
P1127	ETCS Actuator Power Source Circuit Malfunction
P1128	Throttle Control Motor Lock Malfunction
P1129	Electric Throttle Control System Malfunction
P1130	Air Fuel Sensor Circuit Range/Performance
P1133	Air Fuel Sensor Circuit Response Malfunction
P1135	Air Fuel Sensor Heater Circuit Response Malfunction
P1150	A./F Sensor Circuit Range/Performance Malfunction
P1153	A./F Sensor Circuit Response Malfunction
P1155	A./F Sensor Heater Circuit Malfunction
P1200	Fuel Pump Relay Circuit Malfunction
P1300	Igniter Circuit Malfunction No. 1
P1305	Igniter Circuit Malfunction No. 2 (1998-2000 Land Cruiser,2000 Celica &Tundra)
P1310	Igniter Circuit Malfunction No. 2 (Except 1998-2000 Land Cruiser, 2000Celica & Tundra),or Igniter Circuit Malfunction No. 3 (1998-2000 Land Cruiser,2000 Celica & Tundra)
P1315	Igniter Circuit Malfunction No. 4 (1998-2000 Land Cruiser,2000 Celica &Tundra)
P1320	Igniter Circuit Malfunction No. 5 (1998-2000 Land Cruiser & 2000 Tundra)
P1320	Igniter Circuit Malfunction No. 5 (1998-2000 Land Cruiser & 2000 Tundra)
P1330	Igniter Circuit Malfunction No. 7 (1998-2000 Land Cruiser & 2000 Tundra)
P1335	No CKP Sensor Signal Engine Running
P1340	Igniter Circuit Malfunction No. 8 (1998-2000 Land Cruiser & 2000 Tundra)

CODE	DEFINITION
P1345	VVT Sensor/Camshaft Position Sensor Circuit Malfunction Bank 1
P1346	VVT Sensor/Camshaft Position Sensor Circuit Range/Performance Problem(Bank 1)
P1349	VVT System Malfunction Bank 1
P1350	VVT Sensor/Camshaft Position Sensor Circuit Malfunction Bank 2
P1351	VVT Sensor/Camshaft Position Sensor Circuit Range/Performance Problem Bank 2
P1354	VVT System Malfunction Bank 2
P1400	Sub-Throttle Position Sensor Malfunction
P1401	Sub-Throttle Position Sensor Range/Performance Problem
P1405	Turbo Pressure Sensor Circuit Malfunction
P1406	Turbo Pressure Sensor Range/Performance Problem
P1410	EGR Valve Position Sensor Circuit Malfunction
P1411	EGR Valve Position Sensor Circuit Range/Performance
P1500	Starter Signal Circuit Malfunction
P1510	Boost Pressure Control Circuit Malfunction
P1511	Boost Pressure Low Malfunction
P1512	Boost Pressure High Malfunction
P1520	Stop Lamp Switch Signal Malfunction
P1565	Cruise Control Main Switch Circuit Malfunction
P1600	ECM BATT Malfunction
P1605	Knock Control CPU Malfunction
P1630	Traction Control System Malfunction
P1633	ECM Malfunction ECTS Circuit
P1645	Body ECU Malfunction
P1652	IACV Control Circuit Malfunction
P1656	OCV Circuit Malfunction Bank 1
P1658	Waste Gate Valve Control Circuit Malfunction
P1661	EGR Circuit Malfunction
P1662	EGR By-Pass Valve Control Circuit Malfunction
P1663	OCV Circuit Malfunction Bank 2
P1690	OCV Circuit Malfunction
P1692	OCV Open Malfunction
P1693	OCV Closed Malfunction
P1780	PNP Switch Malfunction

6. WARRANTY AND SERVICE

6.1 Limited One Year Warranty

We warrants to its customers that this product will be free from all defects in materials and workmanship for a period of one (1) year from the date of the original purchase, subject to the following terms and conditions:

1. The sole responsibility of us under the Warranty is limited to either the repair or, at the option of us, replacement of the Scan Tool at no charge with Proof of Purchase. The sales receipt may be used for this purpose.
2. This warranty does not apply to damages caused by improper use, accident, flood, lightning, or if the product was altered or repaired by anyone other than the Manufacturer's Service Center.
3. We shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the Scan Tool. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

6.2 Service Procedures

For technical support, please contact your local store or distributor. If it becomes necessary to return the code reader for repair, contact your local distributor for more information.

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